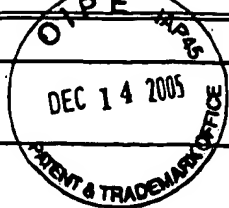
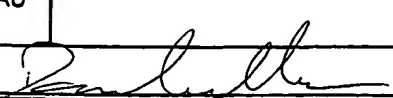
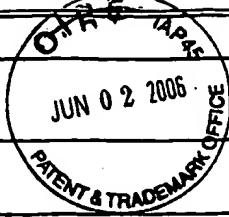


Sheet 1 of 1		INFORMATION DISCLOSURE STATEMENT					
FORM PTO 1449 (modified) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE LIST OF REFERENCES CITED BY APPLICANT(S) (Use several sheets if necessary) Date Submitted to PTO: December 14, 2005		ATTY DOCKET NO. 2000_1328		SERIAL NO. 09/672,946		<div style="text-align: center;">  </div>	
		APPLICANT Mitsuaki OSHIMA et al.		FILING DATE September 29, 2000		GROUP 2634-2611	
U.S. PATENT DOCUMENTS							
EXAMINER INITIAL	AA	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
DH	AA	4,597,090	6-24-86	Fomey, Jr.	—	—	—
	AB	4,077,021	2-28-78	Csajka et al.	—	—	—
	AC	2006/0084760	4-21-05	Wang et al.	—	—	—
	AD	2005/0058633	3-17-05	Epstein et al.	—	—	—
	AE	2005/0922922	—	—	—	—	—
	AF	4,918,437	4-17-90	Jasinski et al.	—	—	—
	AG	5,023,889	6-11-91	Divsalar et al.	—	—	—
	AH	5,063,452	11-5-91	Higurashi	—	—	—
	AI	5,124,852	6-23-92	Suwa et al.	—	—	—
	AJ	5,136,380	8-4-92	Cho	—	—	—
	AK	5,146,335	9-8-92	Kim et al.	—	—	—
	AL	5,148,422	9-15-92	Sako et al.	—	—	—
DH	AM	5,218,436	6-8-93	Sugiyama et al.	—	—	—
FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
DH	AN	2627574	7-21-04	CN	—	—	—
DH	AO	1529838	5-11-05	EP	—	—	abstract
DH	AP	1499725	5-26-04	CN	—	—	only abstract
DH	AQ	2004-159207	6-3-04	JP	—	—	corresponds to AP
DH	AR	1528854	5-11-05	EP	—	—	only abstract
DH	AS	52118	12-16-02	UA	—	—	only abstract
DH	AT	1569334	1-26-05	CN	—	—	— x
OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)							
	AU						
EXAMINER 				DATE CONSIDERED 01/19/06			

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Sheet 1 of 1		INFORMATION DISCLOSURE STATEMENT					
FORM PTO 1449 (modified) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE LIST OF REFERENCES CITED BY APPLICANT(S) (Use several sheets if necessary) Date Submitted to PTO: June 2, 2006			ATTY DOCKET NO. 2000_1328		SERIAL NO. 09/672,946		
			APPLICANT Mitsuaki OSHIMA et al.				
			FILING DATE September 29, 2000		GROUP 2634-2611		
U.S. PATENT DOCUMENTS							
*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
/DH/	AA	4,003,002	1-11-77	Snijders et al.			
/DH/	AB	4,053,713	10-11-77	Nitadori			
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
FOREIGN PATENT DOCUMENTS							
DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO		
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AK							
AL							
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AN							
OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)							
AO							
AP							
AQ							
EXAMINER				DATE CONSIDERED			
/Dac Ha/				03/06/2007			

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INFORMATION DISCLOSURE STATEMENT

FORM PTO 1449 (modified)

ATTY DOCKET NO.
2000_1328SERIAL NO.
09/672,946U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICELIST OF REFERENCES CITED BY APPLICANT(S)
(Use several sheets if necessary)APPLICANT
Mitsuaki OSHIMA et al.FILING DATE
September 29, 2000GROUP
~~2634~~ 2611

Date Submitted to PTO: March 22, 2006

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
/DH/	AA	4,267,592	5-12-81	Craiglow			
/DH/	AB	4,601,045	7-15-86	Lubarsky			
/DH/	AC	4,912,706	3-27-90	Eisenberg et al.			
/DH/	AD	4,914,655	4-3-90	Johannes et al.			
/DH/	AE	5,018,198	5-21-91	Takahashi			
	AF						
	AG						
	AH						
	AI						

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO	
	AJ							
	AK							
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OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)

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FORM PTO 1449 (modified)

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICEATTY DOCKET NO.
2000_1328SERIAL NO.
NEW

09/672946

LIST OF REFERENCES CITED BY APPLICANT(S)
(Use several sheets if necessary)APPLICANT
Mitsuaki OSHIMA et al.

Date Submitted to PTO: September 29, 2000

FILING DATE
September 29, 2000

GROUP

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
AS	AA	5,311,550	5-10-94	Fouche et al.			
	AB	4,630,287	12-16-86	Armstrong			
	AC	4,271,527	6-2-81	Armstrong			
	AD	5,050,188	9-17-91	Dirr			
	AE	5,398,073	3-14-95	Wei			
	AF	5,452,015	9-19-95	Hulyalkar			
	AG	5,565,932	10-15-96	Gitta et al.			
	AH	5,481,412	1-2-96	Bannai et al.			
	AI	3,909,721	9-30-75	Bussgang et al.			

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		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
	AJ	0365431	4-25-90	EP			X
	AK	0485105	5-13-92	EP			X
	AL	92/14343	8-20-92	WO			X
	AM	89/08366	9-8-89	WO			X
	AN	0031193	7-1-81	EP			X

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	AO	Shinji Matsumoto et al., "200 Mb/s 16 QAM Digital Radio-Relay System Operating in 4 and 5 GHz Bands", Japan Telecommunications Review, January 1982, vol. 24, no. 1, pages 65-73.
	AP	M. Pecot et al., "Compatible Coding of Television Images, Part 2. Compatible System", Signal Processing Image Communication, October 2, 1990, no. 3, pages 259-268.
AS	AQ	Mitsuaki Oshima, "Constellation-Code Division Multiplex for Digital HDTV", IEEE, 1992, pages 1086-1092.

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Amandate

DATE CONSIDERED

8.20.02

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FORM PTO 1449 (modified)

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICELIST OF REFERENCES CITED BY APPLICANT(S)
(Use several sheets if necessary)

Date Submitted to PTO: September 29, 2000

ATTY DOCKET NO.
2000_1328SERIAL NO.
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09/672946

APPLICANT
Mitsuaki OSHIMA et al.FILING DATE
September 29, 2000

GROUP

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
AS	AA	4,227,152	10-7-80	Godard et al.	I	I	
	AB	4,525,846	6-25-85	Bremer et al.	I	I	
	AC	4,751,478	6-14-88	Yoshida	I	I	
	AD	4,891,806	1-2-90	Farias et al.	I	I	
	AE	4,903,125	2-20-90	Parker	I	I	
	AF	4,937,844	6-26-90	Kao	I	I	
	AG	5,164,963	11-17-92	Lawrence et al.	I	I	
	AH	5,555,275	9-1996	Oshima	I	I	
	AI						

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		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
	AJ	0311188	4-12-89	EP	I	I	X
	AK	0329158	8-23-89	EP	I	I	X
	AL	64-5135	1-10-89	JP	I	I	X
	AM	63-28145	2-5-88	JP	I	I	X
	AN	62-133842	6-17-87	JP	I	I	X

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	AO	Tricia Hill et al., "A Performance Study of NLA 64-State QAM", IEEE Transactions on Communications, vol. COM-31, June 1983, no. 6, pages 821-826.
	AP	Hideki Ishio et al., "A Proposal of a Carrier Digital Transmission System Using Multi-Level APSK", pages 1-20. p. 20
AS	AQ	Shanmugam, "Digital and Analog Communication Systems" 1979, p. 272.

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DATE CONSIDERED

8.21.02

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTD 1449 (modified)

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICELIST OF REFERENCES CITED BY APPLICANT(S)
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Date Submitted to PTO: September 29, 2000

ATTY DOCKET NO.
2000_1328SERIAL NO.
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APPLICANT
Mitsuaki OSHIMA et al.FILING DATE
September 29, 2000

GROUP

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
AS	AA	5,105,442	4-14-92	Wei	I	I	
	AB	4,048,572	9-13-77	Dogliotti et al.	I	I	
	AC	5,282,019	1-25-94	Basile et al.	I	I	
	AD	5,311,547	5-10-94	Wei	I	I	
	AE	5,267,021	11-30-93	Ramchandran et al.	I	I	
	AF	5,038,219	8-6-91	Yamashita et al.	I	I	
	AG	5,087,975	2-11-92	Citta et al.	I	I	
	AH	5,086,340	2-4-92	Citta et al.	I	I	
	AI						

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		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
	AJ	53-137657	12-1-78	JP	I	I	X
	AK	0282298	9-14-88	Europe	I	I	X
	AL	0392538	10-17-90	Europe	I	I	X
	AM	0490552	6-17-92	Europe	I	I	X
	AN	0506400A2	9-30-92	Europe	I	I	

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	AO	Khaled Fazel et al., Combined multilevel coding and multiresolution modulation, February 8, 1993, Pages 1081-1085
	AP	P. Hoehner et al., Performance of an RCPC-Coded OFDM-based Digital Audio Broadcasting (DAB) System, IEEE Global Telecommunications Conference "Globecom '91", December 2-5, 1991, Vol. 1 of 3, Pages 2.1. - 2.1.7
AS	AQ	K. M. Uz et al., Combined multiresolution source coding and modulation for digital broadcast of HDTV*, 1992, Pages 283-292

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DATE CONSIDERED

08.24.02

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO 1449 (modified)

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Date Submitted to PTO: September 29, 2000

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Mitsuaki OSHIMA et al.FILING DATE
September 29, 2000

GROUP

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
AS	AA	5,142,353	8-25-92	Kageyama et al.	I	I	
	AB	5,197,061	3-23-93	Halbert-Lassalle et al.	I	I	
	AC	5,291,289	3-1-94	Hulyalkar et al.	I	I	
AS	AD	5,166,924	11-24-92	Moose	I	I	
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	AF						
	AG						
	AH						
	AI						

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		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
AS	AJ	0448492A1	9-25-91	Europe	I	I	
	AK	0485108A2	5-13-92	Europe	I	I	
	AL	0525641A2	2-3-93	Europe	I	I	
	AM	0540231A2	5-5-93	Europe	I	I	
	AN	0531046A2	3-10-93	Europe	I	I	

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	AO	K. M. Uz et al., Multiresolution Source and Channel Coding for Digital Broadcast of HDTV, 1992, Pages 61-69.
	AP	Nambi Seshadri et al., Multi-Level Block Coded Modulations with Unequal Error Protection for the Rayleigh Fading Channel, Vol. 4, No. 3, May-June 1993, Pages 325-334.
AS	AQ	William F. Schreiber, Spread-Spectrum Television Broadcasting, SMPTE Journal, August 1992, Pages 538-549.

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08.21.02

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO 1449 (unmodified)

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICELIST OF REFERENCES CITED BY APPLICANT(S)
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Date Submitted to PTO: September 29, 2000

ATTY DOCKET NO.
2000_1328SERIAL NO.
NEW

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APPLICANT
Mitsuaki OSHIMA et al.FILING DATE
September 29, 2000

GROUP

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA						
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	AD						
	AE						
	AF						
	AG						
	AH						
	AI						

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
AS	AJ	85/04541	10-10-85	WO	—	—	
	AK						
	AL						
	AM						
	AN						

OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)

AS	AO	Martin Vetterli et al., Multiresolution Coding Techniques for Digital Television: A Review, Multidimensional Systems and Signal Processing, Volume 3, May 1992, Pages 161-187.
↓	AP	Ezio Biglieri et al., Introduction to Trellis-Coded Modulation with Applications, April 6, 1992, Pages 173-207
AS	AQ	English Language Abstract of European Patent No. 93 30 7575

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DATE CONSIDERED

08.21.02

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FORM PTO 1449 (modified)

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(Use several sheets if necessary)

Date Submitted to PTO: September 29, 2000

ATTY DOCKET NO.
2000_1328SERIAL NO.
NEW

09/16/2004

APPLICANT
Mitsuaki OSHIMA et al.FILING DATE
September 29, 2000

GROUP 2634

U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
AS	AA	4,636,876	1-13-87	Schwartz	I	I	
	AB	4,855,692	8-8-89	Kennard et al.	I	I	
	AC	4,873,701	10-10-89	Tretter	I	I	
	AD	4,958,360	9-18-90	Sari	I	I	
	AE	5,115,453	5-19-92	Calderbank et al.	I	I	
AS	AF	5,168,509	12-1-92	Nakamura et al.	I	I	
	AG						
	AH						
	AI						

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		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
AS	AJ	0122805	10-24-84	EP	-	-	X
AS	AK	63-180280	7-25-88	JP	-	-	abstract
	AL						
	AM						
	AN						

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AS	AO	Kazuhiko Nitadori, Synthesis of Multichannel Orthogonal VSB Signals by Quadrature Method, 1976 International Conference on Communications, June 14-16, 1976, Volume 1, Pages 3-25 - 3-29.
	AP	Thomas M. Cover, Broadcast Channels, IEEE Transactions on Information Theory, January 1972, Pages 2-1.
AS	AQ	"Optimum Weighted PCM for Speech Signals", Sundberg, IEEE Transactions on Communications, Volume COM-26, No. 6, June 1978, Pages 872-881.

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8.24.02

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